

Develop a Python script

Team ID	PNT2022TMID14195
Project Name	SMART WASTE MANAGEMENT SYSTEM FOR METROPOLITIANCITIES
Maximum Marks	4 Marks

SMART WASTE MANAGEMENT SYSTEM FOR METROPOLITIAN CITIES

Create a code snippet using python to

1. Extract weather data from OpenWeatherMap using APIs
2. Send the extracted data to the cloud
3. Receive data from the cloud and view it in the python compiler

AKASH M:

The screenshot shows a web browser with multiple tabs. The active tab is 'home.openweathermap.org'. The website header includes the OpenWeather logo, a search bar, and navigation links: Guide, API, Dashboard, Marketplace, Pricing, Maps, Our Initiatives, Partners, Blog, For Business, Akash, and Support. A green confirmation message states: 'We have sent the confirmation link to askmachi001@gmail.com. Please check your email.' Below this is a navigation bar with links: New Products, Services, API keys, Billing plans, Payments, Block logs, My orders, My profile, and Ask a question. The main content area features two promotional banners. The first banner, titled 'Historical weather for any location', describes the 'Time Machine' technology and lists features: 'Historical weather data available for ANY coordinate' and 'The depth of historical data have been extended to 40 YEARS'. It also mentions that data can be downloaded from a 'Personal account' or by contacting them. The second banner, titled 'Weather Dashboard', describes it as a 'lightweight and flexible visual tool' for customers who want to be notified of weather events. The bottom of the page shows a Windows taskbar with various application icons and a system tray displaying the time as 06:49 on 12-11-2022.

OpenWeatherMap

Weather in your city

coimbatore

Search

Coimbatore, IN overcast clouds

20.9°C temperature from 20.3 to 20.9 °C, wind 1.03 m/s, clouds 100 %, 1013 hpa

Geo coords [11, 76.9667]

Search engine is very flexible. How it works:

- To make it more precise put the city's name, comma, 2-letter country code (ISO3166). You will get all proper cities in chosen country. The order is important - the first is city name then comma then country. Example - London, GB or New York, US.

We use cookies which are essential for the site to work. We also use non-essential cookies to help us improve our services. Any data collected is anonymised. You can allow all cookies or manage them individually.

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DEEPAN M:

OpenWeatherMap

home.openweathermap.org

We have sent the confirmation link to mkdeepan99@gmail.com. Please check your email.

New Products Services API keys Billing plans Payments Block logs My orders My profile Ask a question

Historical weather for any location

Our new technology, Time Machine, has allowed us to enhance the data in the [Historical Weather Collection](#).

- Historical weather data available for **ANY** coordinate
- The depth of historical data have been extended to **40 YEARS**

You can download data from [Personal account](#) or [contact us](#) to order it.

Learn more Go to purchase

Weather Dashboard

The [OpenWeather Dashboard](#) is a lightweight and flexible visual tool for our customers who would like to be notified weather events to make informed decisions and plan actions based on the weather input.

ASHKKARSIDHIK BS:


Browser tabs: (7) WhatsApp, IBM-Project-37667-16603, IBM-Project-2859-165848, IBM, Members, OpenWeather for business.

Address bar: home.openweathermap.org

OpenWeather logo | Weather in your city | Guide | API | Dashboard | Marketplace | Pricing | Maps | Our Initiatives | Partners | Blog | For Business | Ash... | Support

We have sent the confirmation link to ashkkarsidhi.777@gmail.com. Please check your email.

New Products | Services | API keys | Billing plans | Payments | Block logs | My orders | My profile | Ask a question




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[Learn more](#) [Go to purchase](#)



Weather Dashboard

The [OpenWeather Dashboard](#) is a lightweight and flexible visual tool for our customers who would like to be notified weather events to make informed decisions and plan actions based on the weather input.

Windows taskbar: Search the web, ENG IN, 07:07, 12-11-2022

ASHWIN G:


Browser tabs: (7) WhatsApp, IBM-Project-37667-16603, IBM-Project-2859-165848, IBM, Members, OpenWeather for business.

Address bar: home.openweathermap.org

OpenWeather logo | Weather in your city | Guide | API | Dashboard | Marketplace | Pricing | Maps | Our Initiatives | Partners | Blog | For Business | Ash... | Support

We have sent the confirmation link to 19ec011@kpri.ac.in. Please check your email.

New Products | Services | API keys | Billing plans | Payments | Block logs | My orders | My profile | Ask a question




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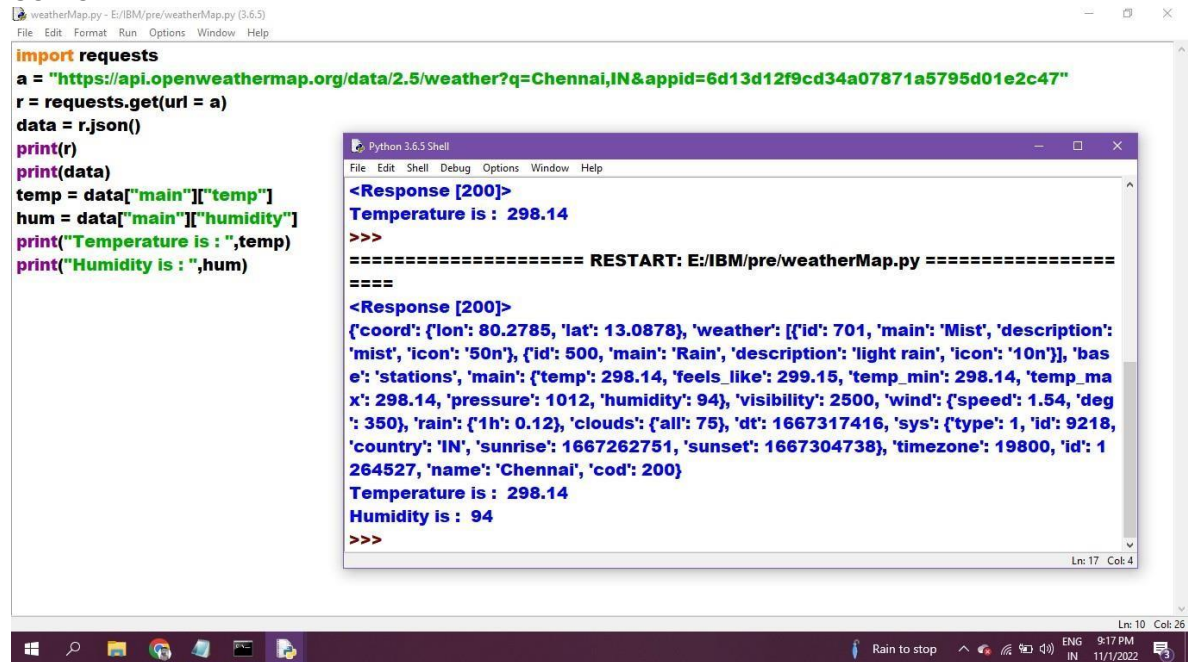


Weather Dashboard

The [OpenWeather Dashboard](#) is a lightweight and flexible visual tool for our customers who would like to be notified weather events to make informed decisions and plan actions based on the weather input.

Windows taskbar: Search the web, ENG IN, 07:10, 12-11-2022

OUTPUT:



The image shows a Python script in a text editor and its execution output in a shell window. The script uses the 'requests' library to fetch weather data from the OpenWeatherMap API for Chennai, India. The output shows the raw JSON response and the extracted temperature and humidity values.

```
weatherMap.py - E:/IBM/pre/weatherMap.py (3.6.5)
File Edit Format Run Options Window Help

import requests
a = "https://api.openweathermap.org/data/2.5/weather?q=Chennai,IN&appid=6d13d12f9cd34a07871a5795d01e2c47"
r = requests.get(url = a)
data = r.json()
print(r)
print(data)
temp = data["main"]["temp"]
hum = data["main"]["humidity"]
print("Temperature is : ",temp)
print("Humidity is : ",hum)
```

```
Python 3.6.5 Shell
File Edit Shell Debug Options Window Help

<Response [200]>
Temperature is : 298.14
>>>
===== RESTART: E:/IBM/pre/weatherMap.py =====
=====
<Response [200]>
{'coord': {'lon': 80.2785, 'lat': 13.0878}, 'weather': [{'id': 701, 'main': 'Mist', 'description': 'mist', 'icon': '50n'}, {'id': 500, 'main': 'Rain', 'description': 'light rain', 'icon': '10n'}], 'base': 'stations', 'main': {'temp': 298.14, 'feels_like': 299.15, 'temp_min': 298.14, 'temp_max': 298.14, 'pressure': 1012, 'humidity': 94}, 'visibility': 2500, 'wind': {'speed': 1.54, 'deg': 350}, 'rain': {'1h': 0.12}, 'clouds': {'all': 75}, 'dt': 1667317416, 'sys': {'type': 1, 'id': 9218, 'country': 'IN', 'sunrise': 1667262751, 'sunset': 1667304738}, 'timezone': 19800, 'id': 1264527, 'name': 'Chennai', 'cod': 200}
Temperature is : 298.14
Humidity is : 94
>>>
```

Ln: 10 Col: 26

Windows taskbar: Rain to stop, 9:17 PM, 11/1/2022